

CLAIMS

What is claimed is:

1. A method comprising:

receiving a request at a content provider from a client over a network, wherein:

the request includes a log session identifier (ID) and a first log ordering ID; and

the content provider includes a plurality of content servers;

processing the request on one said content server to find a result;

incrementing the first log ordering ID to generate a second log ordering ID;

storing a log entry in a log on the one said content server that includes:

the log session ID; and

the first log ordering ID or the second log ordering ID; and

generating a response at the content provider for communicating to the client over the network, wherein the response includes:

the second log ordering ID; and

the result of the processed request.

2. A method as described in claim 1, further comprising:

receiving an additional request at the content provider from the client, wherein the additional request includes the log session ID and the second log ordering ID;

processing the additional request on another said content server to find an additional result;

incrementing the second log ordering ID to generate a third log ordering ID; and

storing a log entry in a log on the another said content server that includes:

- the log session ID; and
- the second log ordering ID or the third log ordering ID; and

generating an additional response for communicating over the network to the client, wherein the additional response includes:

- the third log ordering ID; and
- the additional result of the processed additional request.

3. A method as described in claim 1, further comprising:

- receiving the request by a load balancer included in the content provider; and
- forwarding the request for delivery to the one said content server.

4. A method as described in claim 1, further comprising:

- initiating the log session; and
- generating the log session ID.

5. A method as described in claim 1, wherein the log entry further comprises data that describes the processing of the request.

6. A method as described in claim 1, wherein the request is selected from the group consisting of:

- an order for a good or service that is available for purchase; and
- an order for content that is available for broadcast by the content provider.

7. One or more computer-readable media comprising computer-executable instructions that, when executed, perform the method as recited in claim 1.

8. A content provider comprising a plurality of content servers, wherein each said content server includes a processor and memory configured to maintain:

an application that is executable on the processor to process a request from a client; and

a log for storing one or more log entries, wherein each said log entry has:

a log session identifier (ID) that references a log session that includes the request;

data that describes an action performed in the processing of the request;

and

a log ordering ID representing the sequence in which each said log entry was stored in the log by the content server.

9. A content provider as described in claim 8, further comprising a load balancer that:

is communicatively coupled to the plurality of content servers; and

provides load balancing for the plurality of content servers for the processing of the request from the client.

10. A content provider as described in claim 8, further comprising a log server to:

initiate the log session that includes the request from the client; and
generate the log session ID that references the log session.

11. A content provider as described in claim 8, wherein the data describes an aspect of the action that is performed in the processing of the request that is selected from the group consisting of:

data that had been included in the request;
a time at which the request was received by the application;
a description of the application;
an amount of time taken to process the request; and
data that was included in a response to the request.

12. A content provider as described in claim 8, wherein the log entry further comprises a client ID that identifies the client.

13. A content provider as described in claim 8, wherein each said log entry is stored in the memory of the respective said content server that processed the request.

14. A content provider as described in claim 8, wherein the request is selected from the group consisting of:

an order for a good or service that is available for purchase; and
an order for content that is available for broadcast by execution of the application.

15. A content provider as described in claim 8, where the log ordering ID is unique for each said action that was performed in the processing of the request.

16. A content provider comprising:
a load balancer that provides load balancing of one or more requests received during a log session from a client over a network; and
a plurality of content servers that are communicatively coupled to the load balancer, wherein each said content server includes a processor and memory configured to maintain one or more applications that are executable on the processor to:

process the one or more requests received from the load balancer by performing one or more actions;

increment a log ordering identifier (ID) representing the sequence in which the one or more actions were performed by the plurality of content servers;
and

store a log entry that has:

a log session ID that references the log session;

data that describes one said action; and

the log ordering ID or the incremented log ordering ID.

17. A content provider as described in claim 16, further comprising a log server to:

initiate the log session with the client; and

generate the log session ID that references the log session.

18. A content provider as described in claim 16, wherein the data describes an aspect of the one said action that is selected from the group consisting of:

data that had been included in the one or more requests;

a time at which the request was received by the one or more applications;

a description of the one or more applications that processed the one or more requests;

an amount of time taken to process the one or more requests; and

data that was included in a response to the one or more requests.

19. A content provider as described in claim 16, wherein the log entry further comprises a client ID that identifies the client that provided the one or more requests.

20. A content provider as described in claim 16, wherein the log entry is stored in the memory of the respective said content server that performed the one or more actions to process the request.

21. A content provider as described in claim 16, wherein the log ordering ID is unique for the one said action.

22. A content server comprising:

a processor; and

memory configured to maintain one or more applications that are executable on

the processor to:

- process a request from a client;

- increment a log ordering identifier (ID);

- store a log entry that has:

 - a log session ID that references a log session the includes the request;

 - data that describes the processing of the request; and

 - the log ordering ID or the incremented log ordering ID; and

- form a response for communication to the client, wherein the response includes a result of the processing and the incremented log ordering ID.

23. A content server as described in claim 22, wherein the data describes an aspect of an action that is performed to process the request that is selected from the group consisting of:

- data that had been included in the request;

- a time at which the request was received by the one or more applications;

- a description of the one or more applications;

- an amount of time taken to process the request by the one or more applications;

and

- data that was included in a response to the request.

24. A content server as described in claim 22, wherein the log entry further comprises a client ID that identifies the client that provided the request.

25. A content server as described in claim 22, the log ordering ID represents the sequence in which a first action is performed to process the request with respect to a second action that is performed to process the request.

26. A content server comprising:
a broadcast transmitter;
a processor; and
memory configured to maintain one or more applications that are executable on the processor to:

process a request received from a load balancer;

store a log entry that has:

a log session ID that references a log session the includes the request;

data that describes the processing of the request; and

a log ordering ID; and

form a response for broadcast by the broadcast transmitter that includes a result of the processing.

27. A content server as described in claim 26, wherein the response includes the log ordering ID.

28. A content server as described in claim 26, wherein the data describes an

aspect of an action that is performed to process the request that is selected from the group consisting of:

- data that had been included in the request;
- a time at which the request was received by the one or more applications;
- a description of the one or more applications;
- an amount of time taken to process the request; and
- data that was included in the response.

29. A content server as described in claim 26, wherein the request is selected from the group consisting of:

- an order for a good or service that is available for purchase; and
- an order for content that is available for broadcast through execution of the one or more applications.

30. A content server as described in claim 26, wherein the log entry further comprises a client ID that identifies the client that provided the request to the load balancer.

31. A content server as described in claim 26, the log ordering ID represents the sequence in which a first action is performed to process the request with respect to a second action that is performed to process the request.

32. A data structure comprising a log having a plurality of log entries, wherein

each said log entry includes:

data that describes an action that was performed to process a request from a client,
wherein:

the request was forwarded to one of a plurality of content servers by a load
balancer;

the action was performed by the one said content server during a log
session; and

the plurality of content servers employ load balancing;

a log session identifier (ID) that references the log session; and

a log ordering ID representing the sequence in which the action was performed by
the one said content server with respect to another said action that was performed by
another said content server.

33. A data structure as described in claim 32, wherein the log entry further
comprises a client ID that identifies the client.

34. A data structure as described in claim 32, wherein the log ordering ID is
unique for the action.

35. A system comprising:

a network;

a client communicatively coupled to the network, and including a processor and
memory that is configured to maintain an interface application that is stored in the

memory and is executable on the processor to communicate one or more requests over a network; and

a content provider that is communicatively coupled to the client over the network, and including:

a load balancer that provides load balancing of the one or more requests received during a log session from the client over the network; and

a plurality of content servers that are communicatively coupled to the load balancer, wherein each said content server includes a processor and memory that is configured to maintain one or more applications that are executable on the processor to:

process the one or more requests; and

maintain a log having one or more log entries, wherein each said log entry has:

a log session identifier (ID) that references the log session;

data that describes the processing of one said request; and

a log ordering ID representing the sequence in which each said log entry was stored by the plurality of content servers.

36. A system as described in claim 35, wherein the one or more requests are selected from the group consisting of:

an order for a good or service that is available for purchase; and

an order for content that is available for broadcast by the content provider.

37. A system as described in claim 35, wherein the content provider further

comprises a log server to:

initiate the log session with the client; and

generate the log session ID that references the log session.

38. A system as described in claim 35, wherein the data describes an action performed to process the one said request.

39. A system as described in claim 35, wherein each said log entry further comprises a client ID that identifies the client that communicated each said request.

40. A system as described in claim 35, wherein the content provider further comprises a broadcast transmitter that broadcasts a result of the processing to the client.

41. A system as described in claim 35, wherein the client is a set-top box.

42. A system as described in claim 35, wherein each said log entry is stored in the memory of the respective said content server that processed each said request.